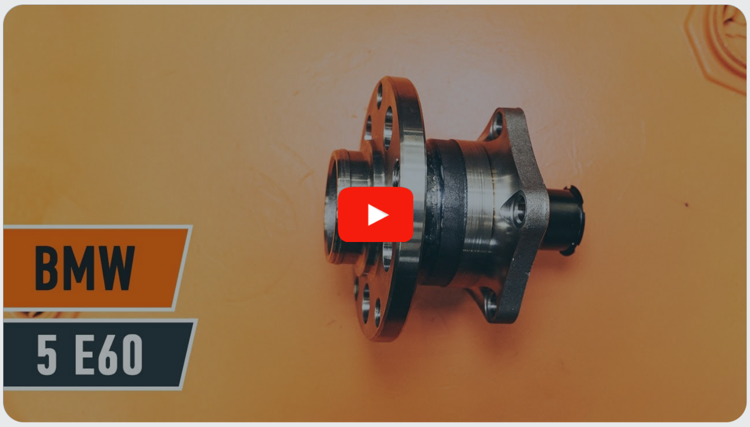
AUTODOC CLUB

How to change rear wheel bearing on **BMW E60** – replacement guide

VIDEO TUTORIAL

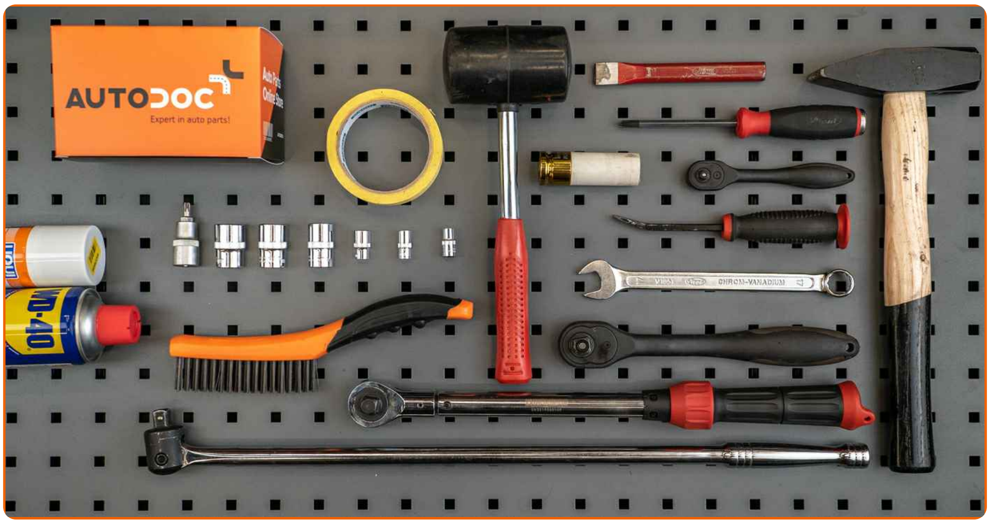


Important!

This replacement procedure can be used for:
BMW 5 Saloon (E39) 520i 2.0, BMW 5 Saloon (E39) 525tds 2.5, BMW 5 Saloon (E39) 523i 2.5, BMW 5 Saloon (E39) 528i 2.8, BMW 5 Saloon (E39) 540i 4.4, BMW 5 Saloon (E39) 535i 3.5, BMW 5 Touring (E39) 520i 2.0, BMW 5 Touring (E39) 523i 2.5, BMW 5 Touring (E39) 540i 4.4, BMW 5 Saloon (E39) 525td 2.5, BMW 5 Touring (E39) 528i 2.8, BMW 5 Saloon (E39) 530d 3.0, BMW 5 Touring (E39) 530d 3.0, BMW 5 Saloon (E39) M5, BMW 5 Touring (E39) 525tds 2.5, (+ 37)

The steps may slightly vary depending on the car design.

REPLACEMENT: WHEEL BEARING – BMW E60. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Copper grease
- Combination spanner #10
- Combination spanner #18
- Drive socket # 10
- Drive socket # 18
- Drive socket # 19
- Drive socket # 21
- Drive socket # 24
- Drive socket # 36
- Drive socket # E12
- Drive socket # E14
- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Crow bar
- Rubber mallet
- Hub slide hammer puller
- Flat chisel
- Hammer
- Pin punch
- Bush and bearing driver set
- Hydraulic transmission jack
- Wheel chock

BUY TOOLS

Replacement: wheel bearing – BMW E60. Professionals recommend:

- Do not re-use the bearing assembly of your BMW E60 car.
- The wheel hub bearing replacement procedure is identical for both wheels on the same axle.
- All work should be done with the engine stopped.

REPLACEMENT: WHEEL BEARING – BMW E60. TAKE THE FOLLOWING STEPS:

1 Secure the wheels with chocks.



2 Loosen the wheel mounting bolts. Use wheel impact socket #17.



3 Raise the rear of the car and secure on supports.

4 Unscrew the wheel bolts.



Replacement: wheel bearing – BMW E60. Tip:

- To avoid injury, hold up the wheel when unscrewing the bolts.

5 Remove the wheel.



6 Unstake the wheel hub retaining nut. Use a flat metal-working chisel. Use a hammer.

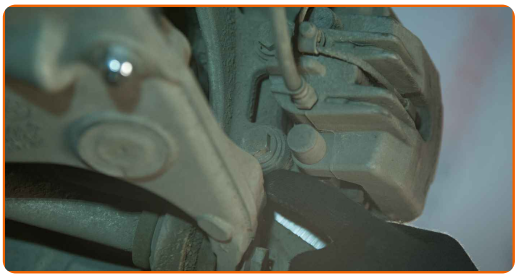


7 Unscrew the wheel hub axle nut. Use a drive socket #36. Use a ratchet wrench.

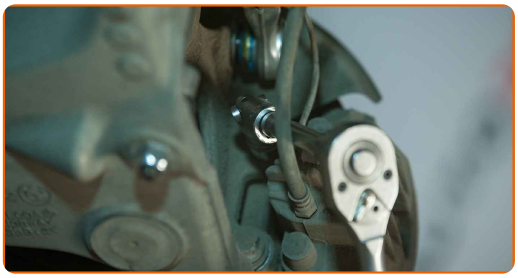


8 Remove the fastening nut.

9 Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



10 Unscrew the caliper bracket fastening. Use a drive socket #18. Use a ratchet wrench.



11 Remove the brake caliper together with its bracket. Use a flat screwdriver.



Replacement: wheel bearing – BMW E60. AUTODOC recommends:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

12 Clean the brake disc fasteners. Use a wire brush. Use WD-40 spray.



13 Unscrew the brake disc fastening. Use HEX No.H6. Use a ratchet wrench.



14 Remove the brake disc. Use a rubber mallet.



15 Using a puller, remove the wheel hub from the bearing. Use the hub slide hammer puller.

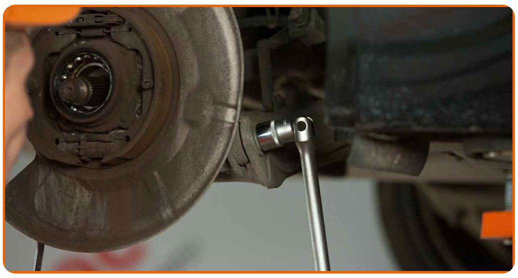


16 Pull the bearing inner race out of the wheel hub. Use a rubber mallet.



17 Clean all joints of the arm. Use a wire brush. Use WD-40 spray.

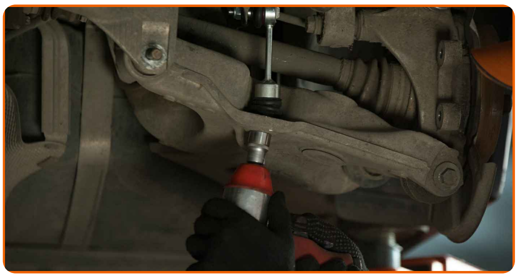
18 Unscrew the front fastener connecting the rear knuckle to the suspension control arm. Use a combination spanner #18. Use a drive socket #24. Use a ratchet wrench.



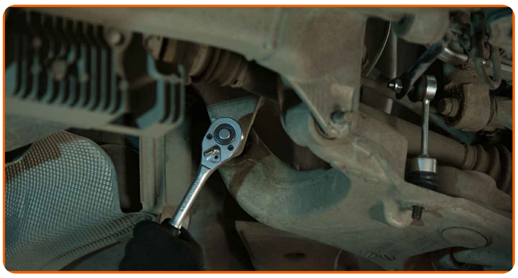
19 Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #21. Use a ratchet wrench.



20 Unscrew the fastener connecting the stabilizer bar with the control arm. Use a drive socket #19. Use a ratchet wrench.



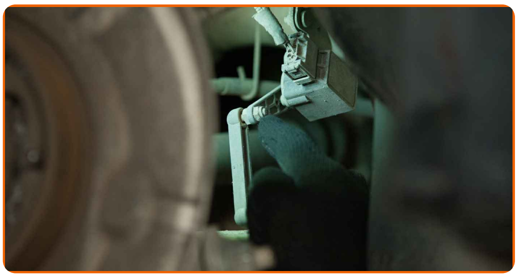
21 Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



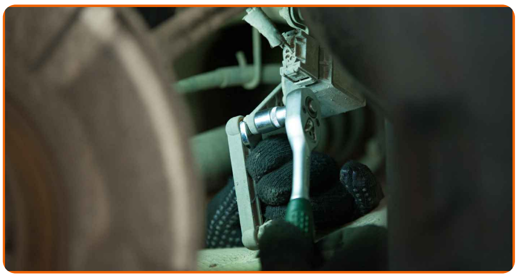
22 Remove the rear fastener of the control arm. Use a flat screwdriver.



23 Clean the fasteners of the headlight levelling sensor. Use a wire brush. Use WD-40 spray.



24 Unscrew the fasteners of the headlight levelling sensor. Use a combination spanner #10. Use a drive socket #10. Use a ratchet wrench.



25 Disconnect the headlight levelling sensor.



26 Remove the rear fastener of the control arm. Use a pin punch. Use a hammer.



27 Remove the stabilizer rod.

28 Detach the control arm. Use a crowbar.



29 Unscrew the fastening bolts of the drive shaft from the reduction gear. Use a drive socket #E12. Use a ratchet wrench.



30 Remove the drive shaft. Use a rubber mallet.



31 Unscrew the fastening bolts of the rear wheel hub bearing. Use a drive socket #E14. Use a ratchet wrench.



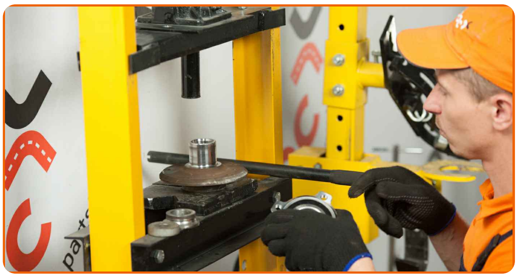
32 Remove the fastening bolts. Use a pin punch. Use a hammer.



33 Remove the hub bearing mounting. Use a flat screwdriver.



34 Press the wheel hub into the bearing inner race. Use a bush and bearing driver set. Use a hammer.



35 Install the new wheel hub with a bearing.



36 Install the fastening bolts.



37 Tighten the fastener of the wheel hub bearing. Use a drive socket #E14. Use a ratchet wrench. Use a torque wrench. Tighten it to 30 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

38 Install the drive shaft.



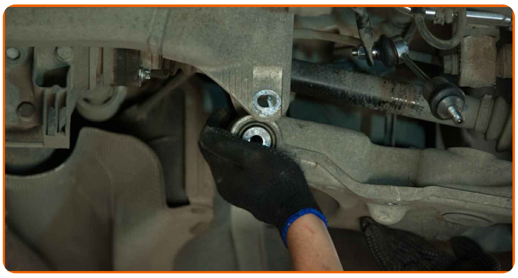
39 Tighten the bolts that fasten the drive shaft to the reduction gear. Use a drive socket #E12. Use a ratchet wrench. Use a torque wrench. Tighten it to 52 Nm torque.



AUTODOC recommends:

- Important! Be sure to use new fasteners.

40 Attach the control arm.



41 Install the transverse stabilizer link.

42 Install the rear fastener of the control arm. Use a hammer. Use a flat screwdriver.

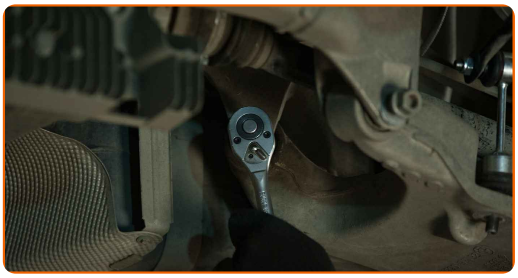


43 Screw the rear arm fastener. Use a combination spanner #18.

44 Install the rear fastener of the control arm. Use a hammer. Use a flat screwdriver.



45 Screw the rear arm fastener. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



46 Tighten the fastener connecting the stabilizer bar with the control arm. Use a drive socket #19. Use a torque wrench. Tighten it to 100 Nm torque.



47 Support the stub axle. Use a hydraulic transmission jack.



48 Tighten the rear fastener of the control arm. Use a combination spanner #18. Use a drive socket #21. Use a torque wrench. Tighten it to 175 Nm torque.



49 Tighten the rear fastener of the control arm. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.

50 Tighten the front fastener connecting the rear knuckle to the suspension control arm. Use a combination spanner #18. Use a drive socket #24. Use a torque wrench. Tighten it to 240 Nm torque.



51

Remove the support from under the stub axle.



AUTODOC recommends:

- BMW E60 – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

52

Reconnect the headlight levelling sensor.



53

Tighten the fasteners of the headlight levelling sensor. Use a combination spanner #10. Use a drive socket #10. Use a torque wrench. Tighten it to 7 Nm torque.



54 Clean the hub. Use a wire brush. Treat the contacting surface. Use copper grease.



55 Install the brake disc.



56 Tighten the brake disc fastening. Use HEX No.H6. Use a torque wrench. Tighten it to 16 Nm torque.



57 Clean the mounting seats of the caliper and its bracket. Use a wire brush. Use WD-40 spray.

58 Install the brake caliper together with its bracket.



59 Tighten the brake caliper bracket. Use a drive socket #18. Use a torque wrench. Tighten it to 110 Nm torque.



60 Install the fastening nut.



61 Tighten the hub. Use a drive socket #36. Use a torque wrench. Tighten it to 250 Nm torque.



62 Restake the wheel hub retaining nut. Use a flat metal-working chisel. Use a hammer.



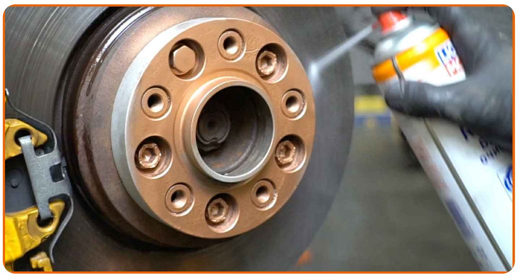
63 Treat all joints of the arm. Treat all joints of the stabiliser link. Use copper grease.



64 Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



65 Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- After applying the spray, wait a few minutes.

66 Install the wheel.



AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. BMW E60

67 Screw in the wheel bolts. Use wheel impact socket #17.



68 Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.



69 Remove the jacks and chocks.

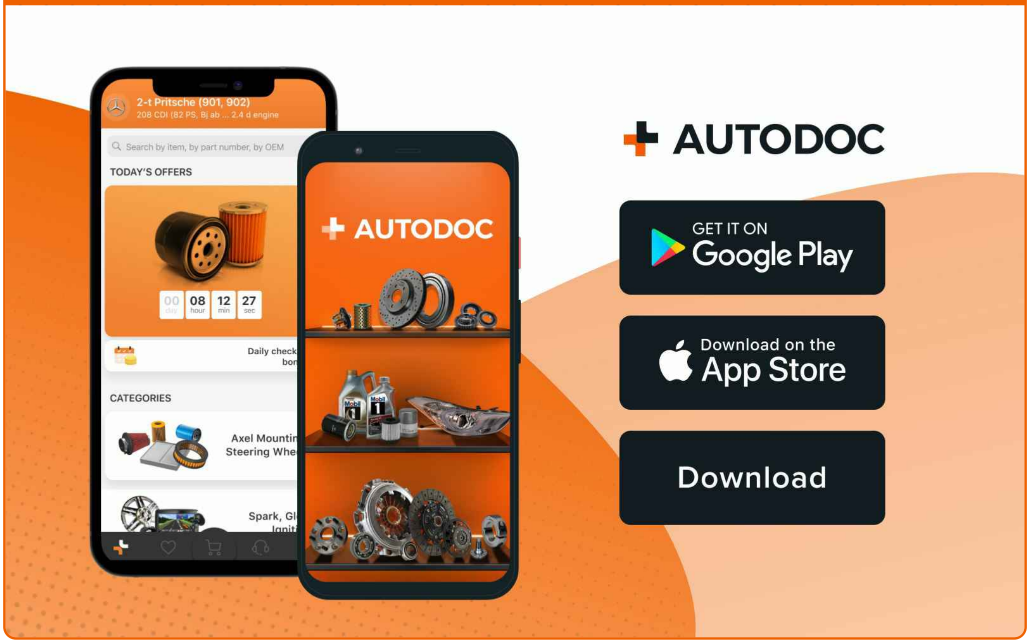


WELL DONE!

VIEW MORE TUTORIALS

AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING



A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

BUY SPARE PARTS FOR BMW

WHEEL BEARING: A WIDE SELECTION

DISCLAIMER:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AutoDoc shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AutoDoc shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AutoDoc shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AutoDoc strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.